

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system configured to dynamically determine from a database and provide one or more input methods, such as one or more software-based keyboards or input panels to facilitate user input to a plurality of application programs, comprising:

a plurality of software input methods that are independent of each of the plurality of application programs, each software input method having an input panel configured to receive user input based on user interaction therewith and stored in a software input method database;

a software input method manager independent of each of the plurality of application programs, the software input method manager configured in conjunction with an application state determination mechanism to perform the acts of:

receiving state information from an application program, the state information corresponding to one or more fields that have initially received focus;

after receiving the state information from the application, and before receiving any user input in any of the initially focused one or more fields, ~~prior to receiving any user selection in any of the plurality of application programs,~~ predicting and selecting an appropriate first input method panel from the plurality of input methods based on a the received state information from of a first the application program; and

after receiving initial user input into the initially focused one or more fields, automatically changing the selected input panel based on a subsequent determination of the application program's state, ~~to predict and select an appropriate second input method from the plurality of input methods based on a state of a second application program, to enable user interaction with the input panel of each input method to provide input to each application program;~~ and

~~an application state determination mechanism coupled to the software input method manager and each of the plurality of applications, the application state determination mechanism operable to determine the state of the first and second application programs.~~

2. (Previously Presented) The system of claim 1 wherein the application program communicates the state to the software input method manager via the application state determination mechanism.

3. (Previously Presented) The system of claim 1, further comprising, a component external to the application program that hosts the application state determination mechanism that determines the state of the application and communicates the state to the software input method manager.

4. (Cancelled)

5. (Currently Amended) The system of claim 14 wherein the application program communicates data corresponding to the one or more fields to the software input method manager, and wherein the software input method manager selects the input method based on the data.

6. (Cancelled)

7. (Currently Amended) The system of claim 1 wherein the application program communicates ~~the key-related data~~ to the software input method one or more key choices to be displayed, and wherein the software input method configures at least some keys on the input panel based on the ~~key-related data~~ one or more key choices to be displayed.

8. (Currently Amended) The system of claim 7 wherein the application program communicates the ~~key-related data~~one or more key choices to the software input method via an XML format.

9. (Currently Amended) The system of claim 7 wherein the ~~key-related~~one or more key choices~~data~~ includes an entire string ~~corresponding to a meaning of at least one variable~~key that is output to the display upon selection by a user.

10. (Original) The method of claim 1 further comprising, a database of previous use input information, wherein the software input method configures at least some keys on the input panel based on the previous user input information.

11. (Currently Amended) A computer-implemented method for dynamically determining one or more software-based input panels prior to any user selections after opening a particular application program, comprising:

receiving, from one or more application programs, application state data corresponding to one or more field identifiers of one or more fields that are in focus~~from a first application program and a second application program, the application program~~received state data received at a software input method manager via an application state determination mechanism that is independent of the one or more application programs and independent of the software input method manager, the software input method manager further being independent of ~~each of the plurality of the~~ one or more application programs;

after receiving the application state data corresponding to one or more field identifiers, and automatically determining, prior to any user selection of a key for input into~~in the first or second application program~~one or more fields that are in focus, automatically determining an input panel from a database of input methods for the ~~first~~ application program ~~and for the second application program~~ from a plurality of software input methods, each software input method being independent of ~~each of the plurality of the~~ application programs, wherein the determined input panel is configured for use by the user with the ~~first~~ one or more application programs ~~or the second application program~~; and

returning data to at least one application program corresponding to user interaction with at least one input panel, the at least one input panel having at least one customized, displayed key that, when actuated, returns the text displayed on the key to at least one application program.

12. (Currently Amended) The method of claim 11 further comprising, ~~receiving key configuration data~~from at least one of the one or more application programs, at least one key choice in relation to the selected input method, and configuring at least one key on the input panel based on the ~~key configuration~~at least one key choice ~~data~~.

13. (Currently Amended) A tangible computer-readable storage medium having computer-executable instructions for performing the method of claim 11.

14. (Currently Amended) A computer-implemented method for dynamically determining one or more software-based input panels prior to any user selections after opening a particular application program, comprising:

(i) receiving application program state data from a first application program and a second application program of ~~the~~ a plurality of application programs corresponding to one or more initially focused fields, each application program state received at a software input method manager via an application state determination mechanism that is independent of the plurality of application programs and independent of the software input method manager, the application state determination mechanism and the software input method manager independent of the application program corresponding to the application program state data;

(ii) upon receiving the application program state data, and prior to any user selection- input into any of the one or more initially focused fields~~after opening any of a plurality of application programs~~, selecting one or more input panels from a database of input panels based on the application program state data of the first and second application programs corresponding to the one or more initially focused fields~~, and prior to any user selections with regard to the first or second application programs~~, the input panel being independent of each of the plurality of application programs;

(iii) displaying keys on the input panel to enable user interaction with the input panel; and

(iv) returning key data to the application program corresponding to user interaction with the input panel.

15. (Original) The method of claim 14 wherein receiving application program state data comprises receiving data corresponding to a communication from the application program.

16. (Original) The method of claim 14 wherein receiving application program state data comprises receiving data corresponding to a communication from component external to the application program.
17. (Original) The method of claim 14 wherein selecting an input panel comprises loading an input method.
18. (Original) The method of claim 14 wherein selecting an input panel comprises notifying a loaded input method.
19. (Currently Amended) The method of claim 14 further comprising, the software input method manager receiving from the application program data indicating- key configuration information ~~corresponding to the state~~ identifying one or more keys to be displayed, and the software input method manager configuring at least some of the keys on the input panel based on the key configuration information received from the application program.
20. (Original) The method of claim 19 wherein receiving key configuration information comprises receiving data corresponding to a communication from the application program.
21. (Original) The method of claim 19 wherein receiving key configuration information comprises receiving data corresponding to a communication from component external to the application program.
22. (Original) The method of claim 21 wherein receiving data corresponding to the communication from the component external to the application program comprises, accessing a database.

23. (Original) The method of claim 14 wherein returning key data to the application program comprises, returning a string of at least two characters in response to a single displayed key being actuated.

24. (Currently Amended) A tangible computer-readable storage medium having computer-executable instructions for performing the method of claim 14.

25. (Currently Amended) In a computerized environment comprising a mobile computing device and one or more computerized instructions stored therein that cause the display of an application program and a touch-based input panel at the mobile computing device, a method of, independent of any user selections after opening the application program, automatically determining and displaying one or more customized, touch-based keyboards that are appropriate for a given application program, comprising:

receiving one or more requests to open an application program;

~~prior to receiving any further user selections,~~ receiving, at a software input method manager, state data from the application program corresponding to one or more fields that have initially received focus;

after receiving the one or more requests and the state data, and prior to receiving any user input into the one or more fields, comparing at least a portion of the received state data with an input method selection database information stored in the mobile computing device, the input method selection database comprising information regarding commonly-entered user text for the application program, one or more customized keys unique to the application program, and one or more customized key arrangements for the application program; and

displaying through the mobile computing device a customized keyboard that is unique to the application program, wherein the customized keyboard includes one or more customized keys comprising text that, when selected by the user, is displayed on the mobile computing device.

26. (Currently Amended) The method as recited in claim 25, wherein the text displayed on the one or more customized keys comprise any one of:

an internet address abbreviation or extension including "http://", "www", ".com", ".net", ".org", ".gov", ".biz", ".edu", ".mil"; or

a full or abbreviated spelling of a month, day or year; ~~or~~.

~~a complete word previously entered by the user during prior use of the first or second application program.~~

27. (New) The method as recited in claim 25, wherein the text displayed on the one or more customized keys comprises a complete word previously entered by the user during prior use of the application program.

28. (New) The system of claim 1, wherein the predicted and selected input panel comprises one or more customized keys comprising a text string that, when selected by the user, is displayed on the mobile computing device.

29. (New) The system of claim 28, wherein the text displayed on the one or more customized keys comprises any one of:

an internet address abbreviation or extension including "http://", "www", ".com", ".net", ".org", ".gov", ".biz", ".edu", ".mil"; or

a full or abbreviated spelling of a month, day or year.

30. (New) The method as recited in claim 28, wherein the text displayed on the one or more customized keys comprises a complete word previously entered by the user during prior use of the application program.